

memory for receiving said digital output and providing an additional digital output related to flow volume, storage means for receiving and storing said additional digital output, a maximum flow input register for receiving said stored additional digital output and for providing a flow output, timing means for transferring said additional output to said maximum flow input register at predetermined time intervals, and a totalizer for receiving said flow output, whereby a continuous flow total is indicated.

8. A total flow measuring system as in claim 7 together with an additional storage means for receiving the flow output of said maximum flow register and a sample rate register for preselecting a sample flow quantity connected to said additional storage means, whereby said additional storage means produces a sampler output for each preselected flow quantity increment.

9. A total flow measuring system as in claim 7 together with a digital to analog converter for receiving said additional digital output and providing an analog output related to flow volume, a recorder for receiving said analog output and presenting a time display of said flow volume.

10. A method of providing total flow measurement comprising the steps of selecting a reference level for a fluid surface level, detecting the height of the fluid

surface level relative to the reference level, generating a signal related to the relative height of the fluid surface level, transmitting the signal to a computer, converting the signal to a digital signal, connecting the digital signal to a function read-only memory for producing a digital flow volume signal, storing the digital flow volume signal in a buffer storage transferring the stored digital flow volume signal to a maximum flow input register at predetermined periods of time, filling the maximum flow input register with the stored signal, and transferring the flow input register counts to a flow totalizer when filled.

11. A method of providing total flow measurement as in claim 10 together with the steps of converting the digital flow volume signal to an analog flow volume signal, and recording the analog flow volume signal on a time display.

12. A method of providing total flow measurement as in claim 10 together with the steps of storing the maximum flow input register counts in an additional buffer storage, preselecting a sample flow increment, introducing the sample flow increment to the additional buffer storage, thereby providing an output from the additional buffer storage at the preselected sample flow increments when it becomes filled.

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